

**STATE FOREST LAND
ENVIRONMENTAL CHECKLIST**

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov> under "SEPA Center."* These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for no project proposals:

Complete this checklist for no project proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For no project actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: **RIVER VIEW TOO SORTS**

Agreement # **30-084815**

2. Name of applicant:

Washington State Department of Natural Resources

3. Address and phone number of applicant and contact person:

**Mike Potter
Department of Natural Resources
411 Tillicum Lane
Forks, WA 98331
(360) 374-6131**

4. Date checklist prepared: **04/02/2009**

5. Agency requesting checklist:

Washington State Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

- a. Auction Date:* **11/18/2009**
b. Planned contract end date (but may be extended): **12/31/2011**
c. Phasing: **NA**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Timber Sale

- a. Site preparation:* **None anticipated.**
b. Regeneration Method: **Hand plant first season after harvest.**
c. Vegetation Management: **Needs will be assessed 5-7 years after harvest.**
d. Thinning: **Needs will be assessed 10-12 years after harvest.**

Roads: Approximately 4,076 feet of new construction, 4,363 feet of reconstruction, and 5,150 feet of pre-haul maintenance is planned for this sale.

Rock Pits and/or Sale: River View Pit and Place Pit. Rock pits used or developed as part of this project may be expanded in the future for other timber sale proposals.

Other: Future forest management activities are anticipated to continue within the WAU, and adjacent to the current proposal. Potential activities may include but are not limited to firewood salvage, maple stump treatment, hardwood slashing, pre-commercial thinning, commercial thinning and regeneration harvest. All future activities will be consistent with the State's Habitat Conservation Plan (HCP), and applicable policy and planning documents.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☒ 303 (d) – listed water body in WAU: ☒ temp ☐ sediment ☐ completed TMDL (total maximum daily load):
☐ Landscape plan:
☐ Watershed analysis:
☐ Interdisciplinary team (ID Team) report:
☒ Road design plan: Dated June 24th 2009
☐ Wildlife report:
☐ Geotechnical report:
☐ Other specialist report(s):
☐ Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):
☒ Rock pit plan: #1 River view Pit #2 Place pit See Road design Plan: Dated June 24th 2009
☒ Other: Policy for Sustainable Forests (July 2006); Final Habitat Conservation Plan (September 1997); State Soil Survey; Forestry Handbook (August 1999). Sustainable Harvest Calculation (Sept 2004).

All documents may be obtained at the Olympic Region Office for review during the SEPA comment period.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Not Applicable

10. List any government approvals or permits that will be needed for your proposal, if known.

☐ HPA ☐ Burning permit ☐ Shoreline permit ☒ Incidental take permit ☒ FPA
☒ Other: Board of Natural Resources Approval

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. Complete proposal description:

Units 1 – 4 of the proposed timber sale River View Too Sorts are located approximately 10 – 14 miles southwest of Port Angeles, Washington on the Little River county road and the DNR's PA-H-1000 road system. Unit 5 is located 14 miles west of Port Angeles off of State Highway 112 and Wasankari Road. This proposed timber sale is located in the Olympic Region, Straits planning unit. The legal description of this five unit proposal is Sections 29, 31, 32, 33 T30N R6W, Section 26 T30N R7W and Sections 11, 14 T30N R8W.

River View Too Sorts is located within the Sutherland-Aldwell, Port Angeles and Salt Creek WAU's. River View Too Sorts, is a five unit variable retention harvest of 60-80 year old timber encompassing approximately 381 gross acres, with an approximate sale volume of 8,518 mbf. Of the total acres assessed for potential harvest, approximately 38 acres have been left in riparian protection and Leave Tree Areas, 338 acres will be variable retention harvested.

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

Description Pre-harvest:

River View Too Sorts is a five unit variable retention harvest of second growth conifer timber originating after harvest in the 1930's. Major species include Douglas fir with minor components of western hemlock and western red cedar. Units 1 and 4 consist of naturally regenerated second-growth conifer timber. Units 2 and 3 of this proposal were commercially thinned approximately 14 years ago and Unit 5 has been commercially thinned approximately 20 years ago. The average DBH found in this proposal is approximately 15 inches. The understory consists of heavy salal in places with salmon berry also present.

Type of Harvest:

This proposal will be a variable retention harvest of approximately 8,518 mbf of second growth conifer timber. The proposed harvest will utilize ground based and/or cable logging methods.

Overall unit objectives:

Objectives of this proposal are to provide financial benefit to the Clallam County Forest Board trust under the guidelines provided by Forest Practice rules, DNR's Habitat Conservation Plan (HCP). Specific objectives include riparian protection, green tree retention plan, protection of soils and unstable slopes and procedures pertaining to threatened and endangered species. Riparian protection measures were designed for all waters in and adjacent to this proposal in accordance with our HCP Strategy. The sale will have green tree retention both dispersed and aggregated throughout the units. Large structurally unique trees were targeted for retention as well as exposed wind firm trees along the windward edges of the stands. These marked trees and clumps will expedite the future development of a more diverse, multi layered stand in the future. Contract language and equipment limitations will help reduce soil impacts. No rubber tired skidders will be allowed and harvest operations will be suspended during periods of wet weather.

c. Road activity summary. See also forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		4076	1.5	0
Reconstruction		4363		0
Abandonment		0	0	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	24			

In addition, 5,150 feet of pre haul maintenance is planned for this proposal. Pre haul maintenance will consist of brushing, spot patching, grading and ditching the existing road prism. Also approximately 2,796' of forest road will be decommissioned upon completion of use.

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See timber sale map available at DNR region office, and/or color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under "SEPA Center.")

a. Legal description:

T30N R6W S29
T30N R6W S31
T30N R6W S32
T30N R6W S33
T30N R7W S26
T30N R8W S10
T30N R8W S11
T30N R8W S14

b. Distance and direction from nearest town (include road names):
Units 1 thru 4 are located 10 – 14 miles southwest of Port Angeles, Washington on the Little River county road and the DNR's PA-H-1000 road system. Unit five is located 14 miles west of Port Angeles off Wasankari road and the PA-J-4000 road system. This proposed timber sale is located in the Olympic Region, Straits planning unit. The legal description of this five unit proposal is Sections 29, 31, 32, 33 T30N R6W, Section 26 T30N R7W and Sections 10, 11, 14 T30N R8W.

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov> under " SEPA Center.")

WAU Name	WAU Acres	Proposal Acres
SUTHERLAND-ALDWELL	49624.5	172
SALT CREEK	28404.6	80
PORT ANGELES	26462.5	86

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website <http://www.dnr.wa.gov> under "SEPA Center" for a broader landscape perspective.)

The proposed harvest lies in three different WAU's: Port Angeles, Sutherland/Aldwell and Salt Creek. All three WAU's have mixed forestland ownership with the major landowners being the U.S Forest Service, Tribal, Private landowners and the Department of Natural Resources. State and private forestland ownerships are generally scattered throughout the WAU with most being in the lower elevations. The U.S Forest Service ownerships are concentrated in both the higher elevations and the lowlands, while small private landowners are scattered along the major transportation routes in the lower elevations. The DNR has approximately 5,196 acres of ownership within the Port Angeles WAU, which equates to approximately 19.6% of the total WAU acreage. Approximately 749 acres of these lands have seen regeneration harvests within the past seven years. The following table breaks down land ownership within the Port Angeles WAU.

LAND MANAGEMENT

Port Angeles WAU

Land Manager	Acres	% of WAU
DNR	5196	19.6
Federal	3368	12.7
Other Land (Private & Other Public Land)	17899	67.6

The DNR has approximately 11,955 acres of ownership within the Salt Creek WAU, which equates to approximately 42.1% of the total WAU acreage. Approximately 426 acres of these lands have seen regeneration harvests within the past seven years. The following table breaks down land ownership within the Salt Creek WAU.

Salt Creek WAU

Land Manager	Acres	% of WAU
DNR	11955	42.1
Tribal	23	0.1
Other Land (Private & Other Public Land)	16427	57.8

The DNR has approximately 6,173 acres of ownership within the Sutherland/Aldwell WAU, which equates to approximately 12.4% of the total WAU acreage. Approximately 368 acres of these lands have seen regeneration harvests within the past seven years. The following table breaks down land ownership within the Sutherland/Aldwell WAU.

Sutherland/Aldwell WAU

Land Manager	Acres	% of WAU
DNR	6173	12.4
Federal	31557	63.6
Other State (Non-DNR)	122	0.2
Tribal	585	1.2
Other Land (Private & Other Public Land)	11188	22.5

Over the past 5 – 10 years private industrial forestlands scattered within the WAU’s have reached rotation age and are currently being harvested on an estimated rotation cycle of 40 – 50 years under the prescriptions of the watershed analysis and the forest practice laws. Federal timberlands have seen very little final harvest activities since the early 1980’s and are not anticipated to change for the foreseeable future. There have been some lowland federal partial cuts occurring within the past several years.

The DNR has an HCP agreement with the federal government concerning threatened and endangered species and their habitats, which requires the department to manage landscapes with the intent to preserve and enhance habitat used by fish and older forest dependent species. This agreement substantially helps the department to mitigate for any potential harmful cumulative effects related to its management activities. The HCP is designed to protect and promote fish and wildlife species and their habitats over a broad regional area. The applicable HCP strategies incorporated into this proposal are as follows:

- * Retaining Riparian Management Zones (RMZ’s) on all streams,
- * Avoiding harvest on unstable slopes,
- * Retaining a minimum of 8 leave trees per acre dispersed and aggregated throughout the proposal.
- * Designing, constructing, and maintaining a road system to minimize potential adverse effects on the environment.
- Procedures pertaining to threatened and endangered species.

Several measures have been taken to ensure that this proposal will not contribute to the potential for adverse environmental impacts. As per our Habitat Conservation Plan riparian management zones with RMZ buffers have been applied to all Type 1, 3 and 4 waters found in or adjacent to our sale boundary. Buffers are designed to protect the unstable portions of the stream banks, and help to protect waters from siltation and thermo increase of water temperatures by providing shade and cover. Buffers also allow the natural occurrence of woody debris that provides pools and eddies for fish habitat along stream banks. Furthermore, the RMZ will develop old-forest characteristics that, in combination with other strategies, will help support old-forest dependant wildlife.

Unit 1 has one Type 3 stream and one Type 1 stream associated with it. Both streams have been protected with a 100 year site index buffer of 160 feet.

Unit 2 has no streams associated with it.

Unit 3 has five Type 5 streams associated with it. The Type 5 streams have been protected with varying width retention buffers. No equipment will be allowed to operate within 30 feet of any type 5 streams.

Unit 4 has two Type 4 streams and four Type 5 streams associated with it, The Type 4 streams have been protected with a 100 foot buffer. The Type 5 streams have been protected with varying width retention buffers. No equipment will be allowed to operate within 30 feet of any Type 5 streams.

Unit 5 has one Type 5 stream, two Type 4 and two Type 3 streams. The Type 3 streams have been protected with a 100 year site index buffer of 160 feet. The type four has been protected with a 100 foot buffer. The Type 5 streams have been protected with varying width retention buffers. No equipment will be allowed to operate within 30 feet of any type 5 streams.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐ Flat, ☐ Rolling, ☒ Hilly, ☒ Steep Slopes, ☐ Mountainous, ☐ Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The Sutherland-Aldwell WAU consists of 49,625 land acres. Elevation ranges from 0 to 6389 feet with a mean elevation of 2029 feet. Average precipitation for the WAU is 50 inches, with rainfall increasing from north to south in the WAU. The landform is generally hilly with gentle to moderately steep slopes. Steeper slopes are found in the south 1/2 of the WAU, especially on National Park lands. The dominant forest type is Douglas fir with associated western red cedar, western hemlock, grand fir, red alder, and big leaf maple. The managed forestlands are primarily regenerated with Douglas fir and red alder.

The Salt Creek WAU consists of 28,405 land acres. Elevation ranges from 0 to 2513 feet with a mean elevation of 634 feet. Average precipitation for the WAU is 47 inches, with rainfall increasing from north to south. The landform is hilly with gentle to moderately steep slopes. Except for Striped Peak located along the coast in the north, most of the steeper slopes are found in the southern portion of the WAU. The dominant forest type is Douglas fir with associated western red cedar, western hemlock, grand fir, red alder, and big leaf maple. The managed forestlands are primarily regenerated with Douglas fir and red alder.

The Port Angeles WAU consists of 26,463 land acres. Elevation ranges from 0 to 6369 feet with a mean elevation of 1029 feet. Average precipitation for the WAU is 28 inches, with rainfall increasing from north to south in the WAU. The landform is generally hilly with gentle to moderately steep slopes. Steeper slopes are found in the south 1/3 of the WAU, especially on National Park lands. The dominant forest type is Douglas fir with associated western red cedar, western hemlock, grand fir, red alder, and big leaf maple. The managed forestlands are primarily regenerated with Douglas fir and red alder.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s). This proposal is located on forest land in the mid elevations of these WAU's. There is moderately steep terrain associated with Units 3 and 4.

b. What is the steepest slope on the site (approximate percent slope)?
Approximately 80% on 10% of the sale area.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.*

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
4332	GRAVELLY LOAM	30-65	129	LOW	MEDIUM
1959	GRAVELLY SANDY LOAM	15-35	116	LOW	LOW
8047	V.GRAVELLY SANDY LOAM	30-65	55	LOW	HIGH
1958	GRAVELLY SANDY LOAM	0-15	29	INSIGNIFICANT	LOW
5257	V.COBBLY SANDY LOAM	0-5	23	INSIGNIFICANT	LOW
5260	V.GRAVELLY LOAMY SAND	30-70	20	MEDIUM	HIGH

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
The statewide landslide inventory (LSI) screening tool indicates the presence of polygons mapped as potential unstable terrain on Units 1 and 4. This screening tool is available on the Forest Practices division website under State Uplands Viewing Tool.

1) Surface indications:

A State Lands slope stability specialist conducted a remote and field review of LSI mapped features as moderate hazards. The Southern boundary of Unit 1 was reviewed in the field by a State Lands slope stability specialist and determined to have no Forest Practices rule identified features and is at a low risk of being a landslide initiation point and a low risk of delivery potential. The Southern boundary of Unit 4 was also reviewed by a state lands slope stability specialist and determined to have no Forest Practices rule identified features and is at a low risk of being a landslide initiation point and a low risk of delivery potential.

2) Is there evidence of natural slope failures in the sub-basin(s)?
☐ No ☒ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

There is some evidence of natural slope failures in the steeper, higher areas of the WAU. These are generally associated with deep-seated landslides, slope gradients that exceed 70 percent, steep stream inner gorges and headwalls.

- 3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☐ No ☒ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:
Associated management activity:
There are many areas within the WAU where slope failures have occurred mainly associated with past road construction practices and broadcast burning on steep, unstable areas.
- 4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☐ No ☒ Yes, describe similarities between the conditions and activities on these sites:
There are areas of potential slope instability found within the inner cores of some streams in the vicinity of this proposal; however the sale was designed to avoid any activity that would impact these features.
- 5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.
Based on remote and field review, the timber sale boundaries have a low risk of impacting slope stability and a low risk of delivering sediment or debris to public resources in the locations indicated above. Due to the harvest unit boundary avoiding high hazard slopes associated with the LSI mapped features; no further investigation was determined to be necessary.
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: 1.5 Approx. acreage new landings: 0.5 Fill source: #1 Riverview Pit #2 Place Pit
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Yes. A small amount of incidental surface erosion could occur during the course of road maintenance and harvest activities. Mitigating measures outlined in question h. below will minimize and control any possible erosion.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*
Less than 1%
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)
Harvesting and road construction will be restricted during periods of heavy rainfall when rutting and surface erosion may occur. Roads will be constructed with properly located ditches, ditch outs and cross drains to divert water onto stable forest floor and/or into stable natural drainages. Ground-based logging will be restricted to slopes less than 30% and no equipment will be allowed within 30' of any Type 5 streams or within any Riparian Management Zones. Leave trees are scattered and clumped throughout the sale units. All timber is to be felled and yarded away from riparian management zones and riparian leave areas. Harvested areas will be reforested within one growing season of the expiration of the contract.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
Insignificant amounts of engine exhaust from logging equipment and dust from passage of log trucks. Logging slash, if burned, will be burned adhering to the State's smoke management plan.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
None.
- c. Proposed measures to reduce or control emissions or other impacts to air, if any:
None.

3. Water

- a. Surface:
- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map available at DNR region office, or forest practice application base maps.)*
- a) Downstream water bodies: **Downstream water bodies include Little River, Elwha River, Salt Creek, Tumwater Creek and the Strait of Juan de Fuca.**
- b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Unnamed Stream	5	10	Variable width retention buffers.
Unnamed Stream	4	5	100 foot buffer
Salt Creek, Unnamed	3	3	100 year site index buffer of 160 feet.
Little River	1	1	100 year site index buffer of 160 feet.

- c) *List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.*

As per our Habitat Conservation Plan riparian management zones with RMZ buffers have been applied to all Type 1, 3 and 4 waters. Buffers are designed to protect the unstable portions of the stream banks, and help to protect waters from siltation and thermo increase of water temperatures by providing shade and cover. Buffers also allow the natural occurrence of woody debris that provides pools and eddies for fish habitat along stream banks. Furthermore, the RMZ will develop old-forest characteristics that, in combination with other strategies, will help support old-forest dependant wildlife.

Unit 1 has one Type 3 stream and one Type 1 stream associated with it. Both streams have been protected with a 100 year site index buffer of 160 feet.

Unit 2 has no streams associated with it.

Unit 3 has five Type 5 streams associated with it. The Type 5 streams have been protected with varying width retention buffers. No equipment will be allowed to operate within 30 feet of any Type 5 stream.

Unit 4 has two Type 4 streams and four Type 5 streams associated with it, The Type 4 streams have been protected with a 100 foot buffer. The Type 5 streams have been protected with varying width retention buffers. No equipment will be allowed to operate within 30 feet of any Type 5 streams.

Unit 5 has one Type 5 stream, two Type 4 and two Type 3 streams. The Type 3 streams have been protected with a 100 year site index buffer of 160 feet. The Type four was protected with a 100 foot buffer. The Type 5 streams have been protected with varying width retention buffers. No equipment will be allowed to operate within 30 feet of any Type 5 stream.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐ No ☒ Yes (See RMZ/WMZ table above and timber sale map available at DNR region office.)
Description (include culverts):
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
None
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fish-passage culvert installation.)*
☒ No ☐ Yes, *description:*
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒ No ☐ Yes, *describe location:*
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒ No ☐ Yes, *type and volume:*
- 7) *Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?*
This WAU does contain terrain susceptible to surface and/or mass erosion. Generally, the high potential areas are located in the higher elevations and are associated with steep unstable terrain. Surface erosion control/prevention measures discussed in B.I.h. would minimize or prevent delivery to surface waters. There is also a general decrease in the amount of Large Woody Debris in streams that were not buffered during past harvest activities which has contributed to a decrease in recruitment and the natural decay process removing existing LWD. Small mass wasting events in the steeper draws have also removed existing LWD from these small streams.
- 8) *Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?*
☐ No ☒ Yes, *describe changes and possible causes:*
There is some evidence of changes to stream channels on some streams within the WAU due to both natural and human caused events. Most are located in the higher elevations of the WAU on steep terrain.
- 9) *Could this proposal affect water quality based on the answers to the questions 1-8 above?*
☐ No ☒ Yes, *explain:*
All work done adjacent to streams has the potential of negative impact on water qualities, but through the use of best known practices this proposal will have minimal effect on water quality due to sale design and protection measures as described throughout this document.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?

Roads: Port Angeles WAU

Land Owner	Miles of Road	Miles per Square Mile
Non-DNR	232.7	5.6
DNR	32.7	0.8
Total	265.4	3.2

Roads: Sutherland/Aldwell WAU

Land Owner	Miles of Road	Miles per Square Mile
Non-DNR	138.6	1.8
DNR	37.1	0.5
Total	175.7	1.1

Roads: Salt Creek WAU

Land Owner	Miles of Road	Miles per Square Mile
Non-DNR	121.0	2.7
DNR	82.5	1.9
Total	203.5	2.3

Data Source & Description: DNR Transportation (TRANS) data. Data is the best estimate of the transportation routes in the state, however, should not be considered a complete inventory of these routes. Updates to this data are variable.

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?

☒ No ☐ Yes, describe:

11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.

☐ No ☒ Yes, approximate percent of WAU in significant ROS zone. Units 2, 3 and a portion of Unit 4 are located within significant ROS zone. The Sutherland/Aldwell WAU has approximately 66% of its area within within the ROS zone and the Port Angeles WAU has approximately 16% of its area within the ROS zone.

Approximate percent of sub-basin(s): The area of this sale proposal within the ROS zone lies within two different sub-basins. Units 2 and 3 lie within sub-basin #2 of the Sutherland/ Aldwell WAU which has 36% of its area within the ROS zone. Unit 4 lies within sub-basin #3 of the Port Angeles WAU and 17% of this sub-basins area is within the ROS zone.

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature? Sub-basin #2 is currently 86% hydrologically mature and will be 76% mature after this harvest proposal. Sub-basin #3 is currently 85% hydrologically mature and will be 75% mature after harvest.

13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)? ☐ No ☒ Yes, describe observations: As described above, some of the larger stream banks can erode during periods of high water and steep headwall areas can fail during rain-on-snow events. The mass wasting described in B.1.d.2. above occurs during peak flow events and can result in accelerated sediment aggradations. Lack of LWD can contribute to stream channelization during peak flow events.

14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact. This proposal should not measurably change the timing, duration, or amount of water in a peak flow event. The harvest prescription, unit size, and location (not in the Rain-on-Snow Zone), will minimize this proposal's potential contribution to peak flows.

15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal? ☒ No ☐ Yes, possible impacts:

- 16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.
Maintaining an RMZ buffer on all type 1, 3 and 4 streams. Recent increases in the number and spacing of culverts to divert water to the forest floor. See B.1.h, B.3.a.1.c and A.13 for additional protection measures.

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.
No
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
None
- 3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☒No ☐Yes, describe:
 a) Note protection measures, if any.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
Storm water runoff will be collected by road ditches and diverted through cross drain culverts and ditch outs onto stable forest floor.
- 2) Could waste materials enter ground or surface waters? If so, generally describe.
No
 a) Note protection measures, if any.

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)
Roads have ditches, ditch outs, and cross drains to divert water to stable forest floor material, and intercepted groundwater will be directed and discharged along its original flow path.

4. Plants

a. Check or circle types of vegetation found on the site:

- ☒deciduous tree: ☒alder, ☒maple
☒evergreen tree: ☒Douglas fir, ☒grand fir
 ☒western hemlock
 ☒red cedar
☒shrubs: ☒huckleberry, ☒salmonberry, ☒salal
☒wet soil plants: ☒skunk cabbage, ☒devil's club

- b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*
Approximately 8,518 mbf of conifer timber will be removed.

- 1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. *(See landscape/WAU and adjacency maps on the DNR website at: <http://www.dnr.wa.gov> under "SEPA Center.")*
Unit 1 is bordered to the West by USFS 65 year old timber, RMZ to the North and South, East by private 65 year timber.

Unit 2 is bordered to the West by 60 year old timber, North by DNR 85 year old timber, East by DNR 60 year old timber and South by Little River Road.

Unit 3 is bordered to the West and East by DNR 65 year old timber and North by DNR 5 year reprod and to the south by the Little River Road.

Unit 4 is bordered by similar DNR 65 year old timber to the North, South, and West. To the East the unit is bordered by a RMZ and the PA-H-1050.

Unit 5 is bordered to the North by DNR 15 year old reprod. East by RMZ and DNR 10 year old reprod, South by the PA-J-4000 and to the West by the PA-J-4010 and PA-J-4000.
- 2) Retention tree plan:
Retention trees have been left both aggregated and dispersed throughout the sale proposal. Dominant trees, large structurally unique trees and snag recruitment trees were targeted for retention. Large structurally unique trees and trees showing wind firmness were targeted for dispersed retention. Clumped retention trees were also concentrated around stable Type 5 streams. These marked leave trees and leave tree clumps will expedite the development of a more diverse, multi-storied canopy layer in the future stand.

c. List threatened or endangered *plant* species known to be on or near the site.

TSU Number	FMU ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
To preserve structural diversity and to meet the requirements of our HCP a minimum of 8 trees per acre have been left both clumped and dispersed throughout the sale area. Retention trees will consist of dominant and co-dominant crown classes. These marked leave trees will expedite the development of a more diverse, multi-storied canopy in the future stand.

5. Animal

- a. Circle or check any birds animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site:

birds: ☒hawk, ☒heron, ☒eagle, ☒songbirds, ☒pigeon,
mammals: ☒deer, ☒bear,
fish: ☒salmon, ☒trout,

- b. List any threatened or endangered species known to be on or near the site (*include federal- and state-listed species*).

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
1	68794	SPOTTED OWL: Site:742-LAKE ALDWELL	THREATENED	ENDANGERED
1	68794	SPOTTED OWL: Site:43-MCDONALD MTN	THREATENED	ENDANGERED
1	68794	SPOTTED OWL: Site:132-MADISON CREEK	THREATENED	ENDANGERED
2	74572	SPOTTED OWL: Site:146-S BRANCH LITTLE R LOWER	THREATENED	ENDANGERED
2	74572	MARBLED MURRELET: Reference No: 49693	THREATENED	THREATENED
2	74572	MARBLED MURRELET: Reference No: 49692	THREATENED	THREATENED
2	74572	MARBLED MURRELET: Reference No: 49691	THREATENED	THREATENED
3	68648	SPOTTED OWL: Site:146-S BRANCH LITTLE R LOWER	THREATENED	ENDANGERED
4	68650	SPOTTED OWL: Site:88-ENNIS CREEK UPPER	THREATENED	ENDANGERED
4	68650	SPOTTED OWL: Site:146-S BRANCH LITTLE R LOWER	THREATENED	ENDANGERED
4	68650	SPOTTED OWL: Site:1083-ENNIS CREEK	THREATENED	ENDANGERED
5	71351	SPOTTED OWL: Site:94-BEAR VALLEY	THREATENED	ENDANGERED
5	71351	SPOTTED OWL: Site:741-SALT CREEK	THREATENED	ENDANGERED
5	71351	SPOTTED OWL: Site:1065-MT BALDY WEST	THREATENED	ENDANGERED

- c. Is the site part of a migration route? If so, explain.
☒Pacific flyway ☐Other migration route: *Explain if any boxes checked:*
This site is part of the Pacific flyway but is not used extensively for resting or feeding by waterfowl.

- d. Proposed measures to preserve or enhance wildlife, if any:
The sale area was determined to be non or marginal murrelet habitat and no special measures were taken for murrelet conservation. The extreme eastern portion of Unit 3 is located within ¼ mile of an occupied murrelet site. Timing restrictions for harvest and road construction will be implemented for this portion of the unit. This proposal is not located within spotted owl habitat as described in the Spotted Owl Settlement agreement dated January 2007.
Eight trees per acre have been left both clumped and dispersed throughout the sale area. Retention trees will consist of dominant and co-dominant crown classes. These marked leave trees will expedite the development of a more diverse, multi-storied canopy in the future stand. In addition 175 old growth trees were identified and protected as legacy trees.

- 1) *Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.*
Species /Habitat: **None** Protection Measures:
Species /Habitat: **None** Protection Measures:

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
None
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
Not anticipated
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: **N/A**

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.
- 1) Describe special emergency services that might be required.
Fire suppression, hazardous waste cleanup.
 - 2) Proposed measures to reduce or control environmental health hazards, if any:
The timber sale contract requires purchaser to minimize risk of fire and does not allow for disposal of any kind of waste on any State lands.
- b. Noise
- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
None
 - 2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.
Noise from chain saws, heavy equipment and log truck traffic while the sale is active.
 - 3) Proposed measures to reduce or control noise impacts, if any:
None

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.)
The proposed site is a state working forest with recreational trails, adjacent properties is a mixture of commercial forest land, National Park, residential and rock pits.
- b. Has the site been used for agriculture? If so, describe.
No
- c. Describe any structures on the site.
None
- d. Will any structures be demolished? If so, what?
No
- e. What is the current zoning classification of the site?
Forest Land and multi use recreational trail system
- f. What is the current comprehensive plan designation of the site?
Commercial forest use.
- g. If applicable, what is the current shoreline master program designation of the site?
None
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
No
- i. Approximately how many people would reside or work in the completed project?
None
- j. Approximately how many people would the completed project displace?
None
- k. Proposed measures to avoid or reduce displacement impacts, if any:
Does not apply
- l. Proposed measures to ensure the proposal are compatible with existing and projected land uses and plans, if any:
The design of this project is consistent with current comprehensive plans and procedures pertaining to DNR's Habitat Conservation Plan and the state Forest Practices Act.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
Does not apply
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
Does not apply
Proposed measures to reduce or control housing impacts, if any:
Does not apply

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?
Does not apply
- b. What views in the immediate vicinity would be altered or obstructed?
New short term views of the Strait of Juan de Fuca and the Olympic Mountain Range would be created from the Foothills Trail system.
- 1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?
☐ No ☒ Yes, viewing location:
Hurricane Ridge, the residential area of Black Diamond, The Foothills Multi Purpose Recreation Trail System
 - 2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
☒ No ☐ Yes, scenic corridor name:
 - 3) How will this proposal affect any views described in 1) or 2) above?
The proposed sale would open up vistas of the Straits and of the Olympics from the Foothills trail system.

- c. Proposed measures to reduce or control aesthetic impacts, if any:
River View Too Sorts has been designed to minimize adverse aesthetic impacts. Leave trees and reserve trees were selected to provide structural diversity as well as aesthetic diversity. In addition the site will be reforested with conifer seedlings with one year of completion of harvest.

11. **Light and Glare**

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
None
- b. Could light or glare from the finished project be a safety hazard or interfere with views?
No
- c. What existing off-site sources of light or glare may affect your proposal?
None
- d. Proposed measures to reduce or control light and glare impacts, if any:
None

12. **Recreation**

- a. What designated and informal recreational opportunities are in the immediate vicinity?
The Department of Natural Resources maintains a multi use recreation trail that passes through units one and four, hikers, hunters, mountain bikers, motor cycles and ORV riders frequent this trail and adjacent road systems.
- b. Would the proposed project displace any existing recreational uses? If so, describe:
The southern loop would have to be closed of the Foothills Trail system to avoid possible unsafe conditions while the sale is active.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
The main trail head would have to be heavily signed to warn users of possible logging dangers in the working forest, as well as signage on the southern loop posting it closed during operation. Falling of timber shall be directional away from the Foothills Trail system and a clean out clause written into the contract to restore the trail to original/pre harvest condition.

13. **Historic and Cultural Preservation**

- a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
None.
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
Several sites are recorded with the Department of Archaeology and Historic Preservation (DAHP) in the general area.
- c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)
Site management plans are being developed in consultation with DAHP and the affected tribe(s).

14. **Transportation**

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
Units 1 thru 4 of this proposal will be accessed via Little River Road, PA-H-1000, PA-H-1050, and PA-H-1200. Unit five will be accessed from State Route 112 and Wasankari road, and the PA-J-4000.
1) *Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?*
No
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
No
- c. How many parking spaces would the completed project have? How many would the project eliminate?
None
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
Yes, approximately 4,076 feet of new construction, 4,363 feet of optional reconstruction and 5,150 feet of pre haul maintenance are planned for this proposal. Pre haul maintenance will consist of brushing, shaping, grading, and ditching the existing road prism.
1) *How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*
This proposal will not affect the overall transportation system in the area.
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
Approximately 12- 20 trips per day during peak harvest activity.
- g. Proposed measures to reduce or control transportation impacts, if any:
Signage around the proposed units will warn of logging traffic to users of the Foothills trail system and Little River county Road.

15. **Public Services**

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
Does not apply
- b. Proposed measures to reduce or control direct impacts on public services, if any.
Does not apply

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: Mike Potter

Olympic Region Forester 2

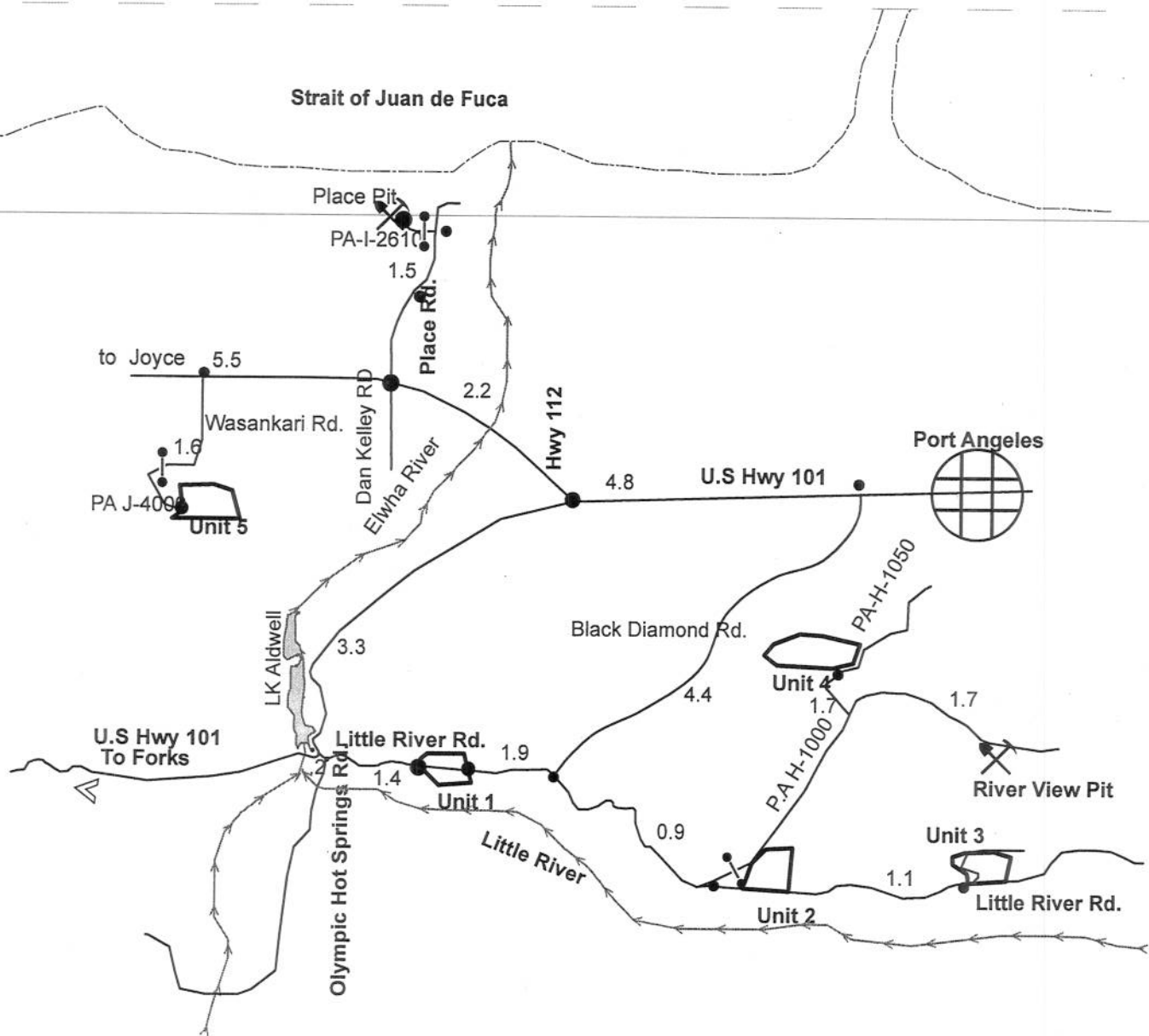
July 29th 2009

A handwritten signature in dark ink, appearing to read "Mike Potter", written over the printed name.

DRIVING MAP

SALE NAME: River View Too Sorts
AGREEMENT#:
TOWNSHIP(S): 30N-R6,7,8W
TRUST(S): Clallam County Forest Board (01)

REGION: Olympic
COUNTY(S): Clallam
ELEVATION RGE: 500-3,000 ft



Legend

	Road		Shore line
	Units		Pit to be used
	Rivers		City
	Miles between		Gate

Units 1,2,3 and 4; From Port Angeles head west on U.S Hwy 101. Travel 8.1 miles and turn left on Olympic Hot Springs Rd. Travel 0.2 miles and turn left on Little River Road, unit 1 is 1.4 miles ahead. Continue on Little River Rd. for 2.8 miles to unit 2. From unit 2 continue on Little River Rd. for 1.1 miles to unit 3. Unit 4 is 1.7 miles beyond the locked gate on the P.A H-1000.

Unit 5: From Port Angeles travel west on U.S Hwy 101 for 4.8 miles. Turn right on Hwy 112 and travel for 7.7 miles. Turn left on Wasankari Rd. Unit is 1.6 miles ahead.

